CLAIMS

1. An improved optical window for an optical device, the improvement comprising the window being characterized by a substantially hourglass shape.

2. The optical window of claim 1, comprising a first pair of opposed sides disposed so that the ends of the opposed sides are spaced farther apart than the centers of the opposed sides.

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3. The optical window of claim 1, wherein the first side and the second side of the window describe hyperbolic curves.

4. The optical window of claim 1, wherein the window is transparent to light of a defined wavelength.

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5. An improved optical wheel comprising a circular disc having a plurality of windows arranged adjacent a periphery of the disc, the improvement comprising each of the plurality of windows being characterized by a substantially hourglass shape.

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6. The optical wheel of claim 5, each window comprising a first pair of opposed sides disposed so that the ends of the opposed sides are spaced farther apart than the centers of the opposed sides.

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7. The optical wheel of claim 5, wherein the first pair of opposed sides of the window describe hyperbolic curves.

8. The optical wheel of claim 5, wherein each of the plurality of windows is transparent to light of a defined wavelength.

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9. The optical wheel of claim 5, wherein each of the plurality of windows is elongated to define a long axis, said long axis being substantially congruent with a radius of the disc.

10.   An optical device, comprising:

a light source;

a detector;

a light path defined between the light source and the detector;

5   a stroboscopic element; and

a plurality of substantially hourglass-shaped windows arranged on the stroboscopic element and operative to be interposed in the light path.

11.   The optical device of claim 10, each window comprising a first pair of 10   opposed sides disposed so that the ends of the opposed sides are spaced farther apart than the centers of the opposed sides.

12.   The optical device of claim 10, wherein the first pair of opposed sides describe hyperbolic curves.

13.   The optical wheel of claim 10, wherein each of the plurality of windows is transparent to light of a defined wavelength.

14.   The optical device of claim 10, wherein each window is elongated to 20   define a long axis, said long axis being substantially congruent with a radius of the wheel.

15.   An optical wheel, comprising:

a circular disc having a periphery;

25   a plurality of windows arranged adjacent the periphery of the disc, each of the plurality of windows comprising:

a top and a base defining a height; and

a first side and a second side defining a width;

wherein each of the plurality of windows is characterized by a substantially 30   hourglass shape.

16.   The optical wheel of claim 15, wherein the first side and the second side are disposed so that the ends of the first side and the second side are spaced farther apart than the centers of the first side and the second side.

17.	The optical wheel of claim 16, wherein the first side and the second side of the window describe hyperbolic curves.

5	18.	The optical wheel of claim 17, wherein each of the plurality of windows is transparent to light of a defined wavelength.

19.	The optical wheel of claim 15, wherein each of the plurality of windows is elongated to define a long axis, said long axis being substantially congruent with a
10	radius of the disc.